IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

	ATTY. DOCKET NO.:	RPS920030021US1
IN RE APPLICATION OF:	§	
	§	
JULIANNE BIELSKI	§	EXAMINER: RECEK, JASON D.
	§	
SERIAL NO.: 10/689,432	§	CONFIRMATION NO.: 2798
	§	
FILED: 20 OCTOBER 2003	§	ART UNIT: 2442
	§	
FOR: DETERMINING A REMOTE MANAGEMENT PROCESSOR'S IP ADDRESS	§	

APPEAL BRIEF UNDER 37 C.F.R. 41.37

Mail Stop Appeal Briefs - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Brief is submitted in support of the Appeal of the Examiner's final rejection of Claims 1-3, 5-9, 11-14, 16, and 22-24 in the above-identified application. A Notice of Appeal was filed in this case on May 27, 2011 and received in the United States Patent and Trademark Office on May 27, 2011.

The required fee of $540.00 for filing the present Appeal Brief was previously paid with a previous Appeal Brief that was filed on March 18, 2010. Therefore, no fee is believed due for filing the present Appeal Brief. However, if such a fee is required, please charge this fee, as well as any additional required fees, to **IBM CORPORATION DEPOSIT ACCOUNT No. 50-0563**.

REAL PARTY IN INTEREST

The real party in interest in the present Application is International Business Machines Corporation, the Assignee of the present application as evidenced by the Assignment set forth at reel 014622, frame 0425.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant, the Appellant' legal representative, or assignee, which directly affect or would be directly affected by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-3, 5-9, 11-14, 16 and 22-24 stand finally rejected by the Examiner as noted in the Final Office Action dated January 31, 2011. Claims 4, 10, 15 and 17-21 are cancelled. The rejection of Claims 1-3, 5-9, 11-14, 16, and 22-24 under 35 U.S.C. § 103(a) and the rejection of Claim 24 under 24 U.S.C. § 112, first paragraph are appealed.

STATUS OF AMENDMENTS

No amendments to the claims have been made subsequent to the January 31, 2011 Final Office Action from which this Appeal is filed.

SUMMARY OF THE CLAIMED SUBJECT MATTER

As claimed in exemplary **Claim 1**, one embodiment of the present invention comprises:

A method for providing an internet protocol (IP) address of at least one remote management processor to a management server, (supported in the present specification, as originally filed, on page 4, lines 1-2) the method comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, (supported on page 4, lines 2-7) such that the Option data comprises an IP address of the management server which is

configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor; (supported on page 6, lines 12-15)

sending a requests from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor; (supported on page 4, lines 5-7)

in response to the request, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data; (supported on page 6, lines 12-17)

in response to receiving the acknowledgment packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement packet to detect the Option data, and storing in the remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data; (supported on page 6, lines 7-9) and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address (supported on page 6, lines 14-18).

As claimed in exemplary **Claim** 7, one embodiment of the present invention comprises:

A system for providing an internet protocol (IP) address of at least one remote management processor to a management server, (supported in the present specification, as originally filed, on page 6, lines 1-2) the system comprising:

a management server; (supported on page 6, line 2)

at least one remote management processor configured to be connected to the management servers through a network, wherein the at least one remote management processor is coupled to a remote hardware server to perform management functions thereon, and wherein the management server is configured to communicate via the network with the at least one remote management

processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor; (supported on page 6, lines 2-8)

an IP address issuing computer connected to the at least one remote management processor through the network, (supported by element 308 in FIG. 3) wherein

the IP address issuing computer is configured to include a plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor, and to include Option data which is associated with the at least one remote management processor and includes an IP address of the management server; (supported on page 6, lines 4-9)

the at least one remote management processor sends a requests to the IP address issuing computer for an IP address to be assigned to the at least one management processor; (supported on page 6, lines 6-7)

the IP address issuing computer assigns an IP address to the at least one remote management processor in response to the requests and sends an acknowledgment packet to the at least one remote management processor which includes the assigned IP address and the Option data; (supported on page 6, lines 14-15)

the at least one remote management processor receives the acknowledgement packet; (supported on page 6, line 15)

a local code in the at least one remote management processor searches the acknowledgement packet to detect the Option data and stores in the at least one remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data, and a shelf life of the received IP address; (supported on page 6, line 24 – page 7, line 1) and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor to enable the communication between the management server and the at least one management processor via the network (supported on page 7, lines 1-4).

As claimed in exemplary **Claim 12**, one embodiment of the present invention comprises:

A computer program product, residing on a non-transitory computer storage medium, for providing an internet protocol (IP) address of at least one remote management processor to a management server, (supported in the present specification, as originally filed, on page 8, lines

11-21) the computer program product including program code that when executed by a computer includes functionality comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, (supported on page 4, lines 2-7) such that the Option data comprises an IP address of a management server which is configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor; (supported on page 6, lines 12-15)

sending a requests from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor; (supported on page 4, lines 5-7)

in response to the requests, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data; (supported on page 6, lines 12-17)

in response to receiving the acknowledgment packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement packet to detect the Option data, and storing in the remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data; (supported on page 6, lines 7-9) and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address (supported on page 6, lines 14-18).

As claimed in exemplary **Claim 22**, one embodiment of the present invention comprises:

A computer-implemented method of enabling a notification to a management server that a client has received an internet protocol (IP) address from a dynamic host control protocol

(DHCP) server, (supported in the present specification, as originally filed, on page 4, lines 1-4) the method comprising:

a DHCP server receiving a requests for an IP address from a client; (supported on page 6, lines 2-3) and

in response to receiving the requests, the DHCP server transmitting a requested client IP address, a shelf life of the requested client IP address, and a management server address to the client, wherein the management server address is an IP address of a management server that monitors operations of the client, and wherein the management server address enables the client to transmit the requested client IP address and the shelf life of the requested client IP address to the management server (supported on page 6, lines 10-18).

As claimed in exemplary **Claim 24**, one embodiment of the present invention comprises:

The method of claim 1, wherein the alert packet is transmitted from said at least one remote processor without said at least one remote processor loading an operating system (supported in the present specification, as originally filed, on page 6, line 23 – page 7, line 6).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. The Examiner's rejection of Claims 1-3, 5, 7-9, 11-14, and 16 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*"), and the Examiner's rejection of Claim 6 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") and *Giglio et al.* (U.S. Patent Application Publication No. 2004/0039821 – "*Giglio*") is to be reviewed on Appeal.

B. The Examiner's rejection of Claims 22-23 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") is to be reviewed on Appeal.

C. The Examiner's rejection of Claim 24 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") and *Khaki, et al.* (U.S. Patent No. 6,067,569 - "*Khaki*") is to be reviewed on Appeal.

D. The Examiner's rejection of Claim 24 under 35 USC 112, first paragraph is to be reviewed on Appeal.

ARGUMENTS

A. **The Examiner's rejection of Claims 1-3, 5, 7-9, 11-14, and 16 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*"), and the Examiner's rejection of Claim 6 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") and *Giglio et al.* (U.S. Patent Application Publication No. 2004/0039821 – "*Giglio*") is to be reviewed on Appeal.**

The Examiner's rejection of Claims 1-3, 5-9, 11-14, and 16 is improper since the cited prior art does not teach or suggest all of the claimed limitations of the present invention.

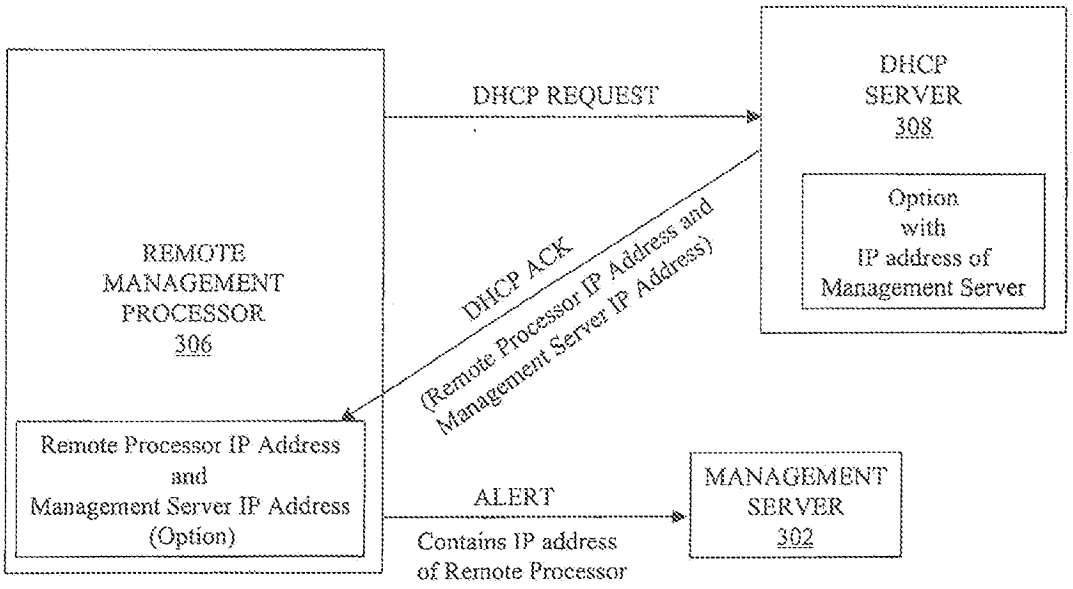
It is axiomatic that "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (BD. Pat. App. & Inter. 1985); MPEP §

706.02(j). As stated in Section 2141(III) of the MPEP, "Prior art is not limited to just the references being applied, but includes the understanding of one of ordinary skill in the art…however, Office personnel must explain why the differences(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art." (Citing *Dann v.* Johnston, 425 U.S. 219,230, 189 USPQ 257, 261 (1976).) (See also *KSR International Co. v. Teleflex, Inc, et al.*, 127 S. Ct. 1727 (2007).)

With reference to exemplary **Claim 1**, a combination of the cited art does not teach or suggest:

"in response to the detecting of the Option data, automatically sending the alert packet to the destination address" (of the management server) "by the at least one remote management processor, such that the alert packet includes the received requested IP address of the at least one remote management processor," as supported in the present specification on page 6, lines 14-18, and in FIG. 3 of the present specification.

Consider now FIG. 3 of the present application:



When remote management processor 306 (i.e., a client of a DHCP server) requests an IP address from DHCP server 308, the DHCP server 308 sends a packet to the remote management processor 306. This packet contains not only the newly-assigned IP address for remote management processor 306, but it also includes Option data. This Option data includes the address of management server 302. By extracting the address of management server 302 from the Option data, remote management processor 306 can send management server 302 an alert, letting management server 302 know that remote management processor 306 has received its requested IP address from DHCP server 308. (See page 6, lines 1-18 of the present specification.)

A combination of the cited art does not teach or suggest the feature of a client (i.e., the remote management processor 306) sending an IP address of a remote management processor to a management server, as presently claimed. The final Office Action cites paragraphs [0286] – [0288] of *Hanson* as teaching this feature. This cited passages states:

> [0286] It is common to use a Dynamic Host Configuration Protocol (DHCP) to automatically configure network devices that are newly activated on such a subnet. For example, a DHCP server on the sub-net typically provides its clients with (among other things) a valid network address to "lease". DHCP clients may not have permanently assigned, "hard coded" network addresses. Instead, at boot time, the DHCP client requests a network address from the DHCP server. The DHCP server has a pool of network addresses that are available for assignment. When a DHCP client requests a network address, the DHCP server assigns, or leases, an available address from that pool to the client. The assigned network address is then "owned" by the client for a specified period ("lease duration"). When the lease expires, the network address is returned to the pool and becomes available for reassignment to another client. In addition to automatically assigning network addresses, DHCP also provides netmasks and other configuration information to clients running DHCP client software. More information concerning the standard DHCP protocol can be found in RFC2131.
>
> [0287] Thus, when a Mobile End System 104 using DHCP roams from one subnet to another, it will appear with a new network address. In accordance with the present invention, Mobile End Systems 104 and Mobility Management Server 102 take advantage of the automatic configuration functionality of DHCP, and coordinate together to ensure that the Mobility Management Server recognizes the Mobile End System's "new" network address and associates it with the

previously-established connection the Mobility Management Server is proxying on its behalf.

[0288] The preferred embodiment uses standard DHCP Discover/Offer client-server broadcast messaging sequences as an echo request-response, along with other standard methodologies in order to determine if a Mobile End System 104 has roamed to a new subnet or is out of range. In accordance with the standard DHCP protocol, a Mobile End System 104 requiring a network address will periodically broadcast client identifier and hardware address as part of a DHCP Discover message. The DHCP server will broadcast its Offer response (this message is broadcast rather than transmitted specifically to the requesting Mobile End System because the Mobile End System doesn't yet have a network address to send to). Thus, any Mobile End System 104 on the particular subnet will pick up any DHCP Offer server response to any other Mobile End System broadcast on the same subnet. (All emphasis added.)

As highlighted, the cited passage states that a Mobility Management Server 102 can recognize the new network address of a client (Mobile End System 104). "How" the Mobility Management Server 102 actually obtains that new network address of the client (or even knows that such an address has been assigned) is taught in paragraph [0288] (standard broadcast messaging sequences), and more clearly in paragraph [0289], which states:

[0289] The present invention provides DHCP listeners to monitor the DHCP broadcast messages and thereby ascertain whether a particular Mobile End System 104 has roamed from one subnet to another and is being offered the ability to acquire a new network address by DHCP.

As further clarified in paragraph [0300] of *Hanson*, information about the new IP addresses is "continually updated based on DHCP broadcast traffic appearing on network 108."

That is, the Mobility Management Server 102 "listens" for data traffic from the DHCP server, which broadcasts new IP addresses onto the network. If the Mobility Management Server 102 recognizes one of the IP addresses as being sent to a client that it supervises, then it makes a note as such. Thus, in *Hanson* the client's new IP address is sent from the DHCP server to the Mobility Management Server, NOT from the client (i.e., the presently claimed remote management processor) to the Mobility Management Server (i.e., the presently claimed management server 302). Thus, the feature of sending the alert packet to the destination address

("IP address of the management server") by the at least one remote management processor, such that the alert packet comprises the received requested IP address of the at least one remote management processor is not taught or suggested. Note that the distinction is not trivial, since the presently claimed invention allows the client (i.e., remote management processor) to control what information its management server receives.

In the January 31, 2011 final Office Action, the Examiner cites a single line from *Hanson* in paragraph [0287] as teaching/suggesting that the client tells the management server what the client's new IP address is. This line states that the "Mobile End Systems 104" (i.e., a client) "and the Mobility Management Server 102" (i.e., a management server) "coordinate together to ensure that the Mobility Management Server recognizes the Mobile End System's "new" network address and associates it with the previously-established connection the Mobility Manager Server is proxying on its behalf." However, there is no teaching or suggestion that coordinate together means that the client (Mobile End Systems 104) sends its new IP address to the management server (Mobility Management Server 102). Rather, the Mobility Management Server 102 obtains the client's IP address from the broadcast of IP addresses from the DHCP server (as described in paragraph [0308] of *Hanson*):

> [0308] In the preferred embodiment, all Mobile End Systems 104 transmit the same Client Identifier and Hardware Address in DHCP Discover requests. This allows the listener data structures and associated processes to distinguish Mobile End System-originated Discover requests from Discover requests initiated by other network devices. Likewise, the DHCP server will broadcast its response, so any Mobile End System 104 and/or the Mobility Management Server 102 will be able to pick up the DHCP server Offer response to any other Mobile End System. Since multiple DHCP servers can respond to a single DHCP Discover message, the listener data structures shown in FIG. 16 store each server response in a separate data block, tied to the main handle via linked list. (Emphasis added.)

The January 31, 2011 final Office Action also cites paragraph [0006] of *Doherty* as expressly teaching the feature of "sending the address of a management server from a DHCP server to a host in order for the host to contact the management server." This paragraph, cited in full, states:

> [0006] Network protocols enable communications between a client and a management server. For instance, the Dynamic Host Configuration Protocol (DHCP), RFC 1541, and the Bootstrap Protocol (BOOTP), RFC 951, allow a booting host, such as a client, to configure itself dynamically and without user intervention. As such, DHCP or BOOTP may assign a host an IP address and convey to the host a file from which to download a boot program from some management server, the management server's address, and the address of an Internet gateway (where present). (Emphasis added.)

Restated, this passage states that a management server (i.e., a DHCP or a BOOTP server) assigns the client an IP address, along with the management (DHCP/BOOTP) server's address, to which the client can send a request for a boot program. Note that the management server and the DHCP server are one and the same in *Doherty*. In contrast, the present invention claims that the DHCP server and the management server are distinct entities, and thus pose the problem solved by the present invention. That is, the management server is initially unaware that the client has received an IP address from the DHCP server. Thus, the message from the DHCP server includes the address of the management server, in order to allow the client to let the management server know that it has received an IP address form the DHCP server ("sending the alert packet to the destination address" (of the management server) "by the at least one remote management processor, such that the alert packet includes the received requested IP address of the at least one remote management processor").

Furthermore, a combination of the cited art does not teach/suggest that Option data (sent from the IP address issuing computer) comprises "an IP address of the management server which is configured to communicate via a network with the at least one remote management processor." The January 31, 2011 final Office Action states that this feature is also taught by paragraph [0287] of *Hanson* (reproduced above). However, paragraph [0287] of *Hanson* merely teaches that Mobile End System 104 can retrieve its current IP address when roaming from one subnet to another. There is no teaching/suggestion of telling the client what the IP address of its management server is.

Thus, Appellant respectfully requests that the rejection of **Claims 1-3, 5-9, 11-14, and 16** be withdrawn, and that **Claims 1-3, 5-9, 11-14, and 16** be allowed to issue.

B. The Examiner's rejection of Claim 22-23 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") is to be reviewed on Appeal.

The Examiner's rejection of Claim 22-23 is improper since a combination of the cited art does not teach or suggest all of the claimed limitations of the present invention.

With respect to **Claim 22** combination of the cited art does not teach or suggest "the DHCP server transmitting a requested client IP address, a shelf life of the requested client IP address, and a management server address to the client, wherein the management server address is an IP address of a management server that monitors operations of the client, and wherein the management server address enables the client to transmit the requested client IP address and the shelf life of the requested client IP address to the management server," as supported in the present specification on page 6, lines 10-18.

More specifically, a combination of the cited art does not teach or suggest the DHCP server transmitting a management server IP address to the client, where the management server monitors operations of the client. As described above, *Hanson* (e.g., in paragraph [0286]) teaches a system in which a DHCP server sends a client IP addresses to that client. There is no teaching or suggestion of the DHCP server sending a management server IP address to the client that is being monitored by that management server, and wherein the management server address enables the client to transmit the requested client IP address and the shelf life of the requested client IP address to the management server.

Thus, Appellant respectfully requests that the rejection of **Claims 22-23** be withdrawn, and that **Claims 22-23** be allowed to issue.

C. **The Examiner's rejection of Claim 24 under 35 USC 103(a) as being unpatentable over *Hanson, et al.* (U.S. Patent Application Publication No. 2003/0120811 – "*Hanson*") in view of *Doherty, et al.* (U.S. Patent Application Publication No. 2003/0018763 – "*Doherty*") and *Khaki, et al.* (U.S. Patent No. 6,067,569) is to be reviewed on Appeal.**

The Examiner's rejection of Claim 24 is improper since the cited prior art does not teach or suggest all of the claimed limitations of the present invention.

A combination of the cited art does not teach or suggest "wherein the alert packet is transmitted from said at least one remote processor without said at least one remote processor loading an operating system (supported in the present specification, as originally filed, on page 6, line 23 – page 7, line 6).

In the January 31, 2011 final Office Action, the Examiner states that *Khaki* teaches the use of a network card in col. 2, line 59 – col. 3, line 8:

> In accordance with a first aspect of the present invention, a method of fast-forwarding a network packet is performed in a general-purpose computer system. "Fast-forwarding" refers to the network card performing the routing rather than a main central processing unit performing the routing. The computer system has a main central processing unit and a network card for interfacing the computer system with multiple networks. The network packet is received in the network card and is destined to a selected one of the networks. The received network packet is analyzed by the network card to determine whether the network packet should be fast-forwarded to its destination network by the network card or alternatively, routed by the main central processing unit. When it is determined that a network packet should be fast-forwarded to the destination network by the network card, it is fast-forwarded without intervention of the main central processing unit. (Emphasis added.)

The cited passage does not use a remote processor, which performs management functions on a server (see base **Claim 1**), to transmit the alert packet, as is presently claimed ("the alert packet is transmitted from said at least one remote processor"). Rather, *Khaki* teaches the use of a network card to transmit messages (without bothering the main central processing

unit). Thus, *Khaki's* teachings of the use of a network card do not teach/suggest the claimed feature of Claim 24 in which the remote processor transmits the alert packet, particularly without the remote processor loading an operating system.

Thus, Appellant respectfully requests that the rejection of **Claim 24** be withdrawn, and that **Claim 24** be allowed to issue.

D. The Examiner's rejection of Claim 24 under 35 USC 112, first paragraph is to be reviewed on Appeal.

The Examiner's rejection of Claim 24 is improper since the specification properly supports the claimed features.

It is axiomatic that to satisfy the written description requirement, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. See, e.g., *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003); *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d at 1563, 19 USPQ2d at 1116. Furthermore, an amendment to the claims or the addition of a new claim must be supported by the description of the invention in the application as filed. *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989).

Claim 24 includes the feature of the alert packet being "transmitted from said at least one remote processor without said at least one remote processor loading an operating system" (supported in the present specification, as originally filed, on page 6, line 23 – page 7, line 6). The cited passage states:

> With reference now to block 404, the administrator of the management server continues configuring the DHCP server by defining Option data, which includes the IP address of the management server. As described above, the remote management processor has special code that looks for the Option data in the DHCP ACK packet. When the Option data containing the IP address of the management server is detected (block 406), the remote sub-system processor then sends an ALERT message to the management server (block 408), alerting the

> management server to the fact that the remote management processor now has an IP address and what that IP address is, thus enabling the management server in utilizing the function of the remote management processor. This function may or may not require the use of an operating system, thus making the management processor's function available as soon as an IP address is assigned. (Emphasis added.)

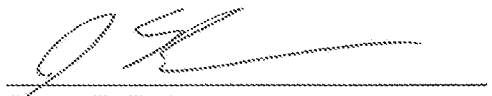
The Examiner's position is that the specification teaches that an OS may or may not be used, which is not the same as loading the OS. Appellants respectfully disagree. As shown in the Appendix of the present brief, the verb "load" means "to bring all or part of a computer program into memory from auxiliary storage so that the computer can run the program." Thus, an inherent requirement of using an operating system is to first load it. That is, "use of an operating system" inherently teaches that the operating system had to have been loaded.

Thus, Appellant respectfully requests that the rejection of **Claim 24** be withdrawn, and that **Claim 24** be allowed to issue.

CONCLUSION

Appellants have pointed out with specificity the manifest error in the Examiner's rejections, and the claim language which renders the invention patentable over the various combinations of references, and which is properly supported and enabled by the specification as originally filed. Appellants, therefore, respectfully request that all rejections of the Examiner be reversed.

Respectfully submitted,



James E. Boice
Reg. No. 44,545
LAW OFFICE OF JIM BOICE
3839 Bee Cave Road, Suite 201
West Lake Hills, Texas 78746
512-306-1200

ATTORNEY FOR APPELLANT

CLAIMS APPENDIX

1. A method for providing an internet protocol (IP) address of at least one remote management processor to a management server, the method comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, such that the Option data comprises an IP address of the management server which is configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

sending a request from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor;

in response to the request, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data;

in response to receiving the acknowledgment packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement packet to detect the Option data, and storing in the remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address.

2. The method of claim 1, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address assigned to the at least one remote management processor and a shelf life of the assigned IP address.

3. The method of claim 2, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server is running a management server software package to manage the at least one remote management processor.

4. (cancelled)

5. The method of claim 3, wherein the sending of the request from the at least one remote management processor to the IP address issuing computer for an address for the at least one remote management processor is automatically prompted by the at least one remote management processor being powered on.

6. The method of claim 3, wherein an administrator of the management server defines the Option data configured in the IP address issuing computer.

7. A system for providing an internet protocol (IP) address of at least one remote management processor to a management server, the system comprising:

a management server;

at least one remote management processor configured to be connected to the management servers through a network, wherein the at least one remote management processor is coupled to a remote hardware server to perform management functions thereon, and wherein the management server is configured to communicate via the network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

an IP address issuing computer connected to the at least one remote management processor through the network, wherein

the IP address issuing computer is configured to include a plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor, and to include Option data which is associated with the at least one remote management processor and includes an IP address of the management server;

the at least one remote management processor sends a request to the IP address issuing computer for an IP address to be assigned to the at least one management processor;

the IP address issuing computer assigns an IP address to the at least one remote management processor in response to the request and sends an acknowledgment packet to the at least one remote management processor which includes the assigned IP address and the Option data;

the at least one remote management processor receives the acknowledgement packet;

a local code in the at least one remote management processor searches the acknowledgement packet to detect the Option data and stores in the at least one remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data, and a shelf life of the received IP address; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor to enable the communication between the management server and the at least one management processor via the network.

8. The system of claim 7, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address assigned to the at least one remote management processor and a shelf life of the assigned IP address.

9. The system of claim 8, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server

identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server is running a management server software package to manage the at least one remote management processor.

10. (cancelled)

11. The system of claim 9, wherein the sending of the request from the at least one remote management processor to the IP address issuing computer for an IP address for the at least one remote management processor is prompted by the at least one remote management processor being powered on.

12. A computer program product, residing on a non-transitory computer storage medium, for providing an internet protocol (IP) address of at least one remote management processor to a management server, the computer program product including program code that when executed by a computer includes functionality comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, such that the Option data comprises an IP address of a management server which is configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

sending a request from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor;

in response to the request, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data;

in response to receiving the acknowledgment packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement

packet to detect the Option data, and storing in the remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address.

13. The computer program product of claim 12, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address assigned to the at least one remote management processor and a shelf life of the assigned IP address.

14. The computer program product of claim 13, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server is running a management server software package to manage the at least one remote management processor.

15. (cancelled)

16. The computer program product of claim 14, wherein the sending of the request, from the at least one remote management processor to the IP address issuing computer for an address for the at least one remote management processor is automatically prompted by the at least one remote management processor being powered on.

17-21. (cancelled)

22. A computer-implemented method of enabling a notification to a management server that a client has received an internet protocol (IP) address from a dynamic host control protocol (DHCP) server, the method comprising:

a DHCP server receiving a request for an IP address from a client; and

in response to receiving the request, the DHCP server transmitting a requested client IP address, a shelf life of the requested client IP address, and a management server address to the client, wherein the management server address is an IP address of a management server that monitors operations of the client, and wherein the management server address enables the client to transmit the requested client IP address and the shelf life of the requested client IP address to the management server.

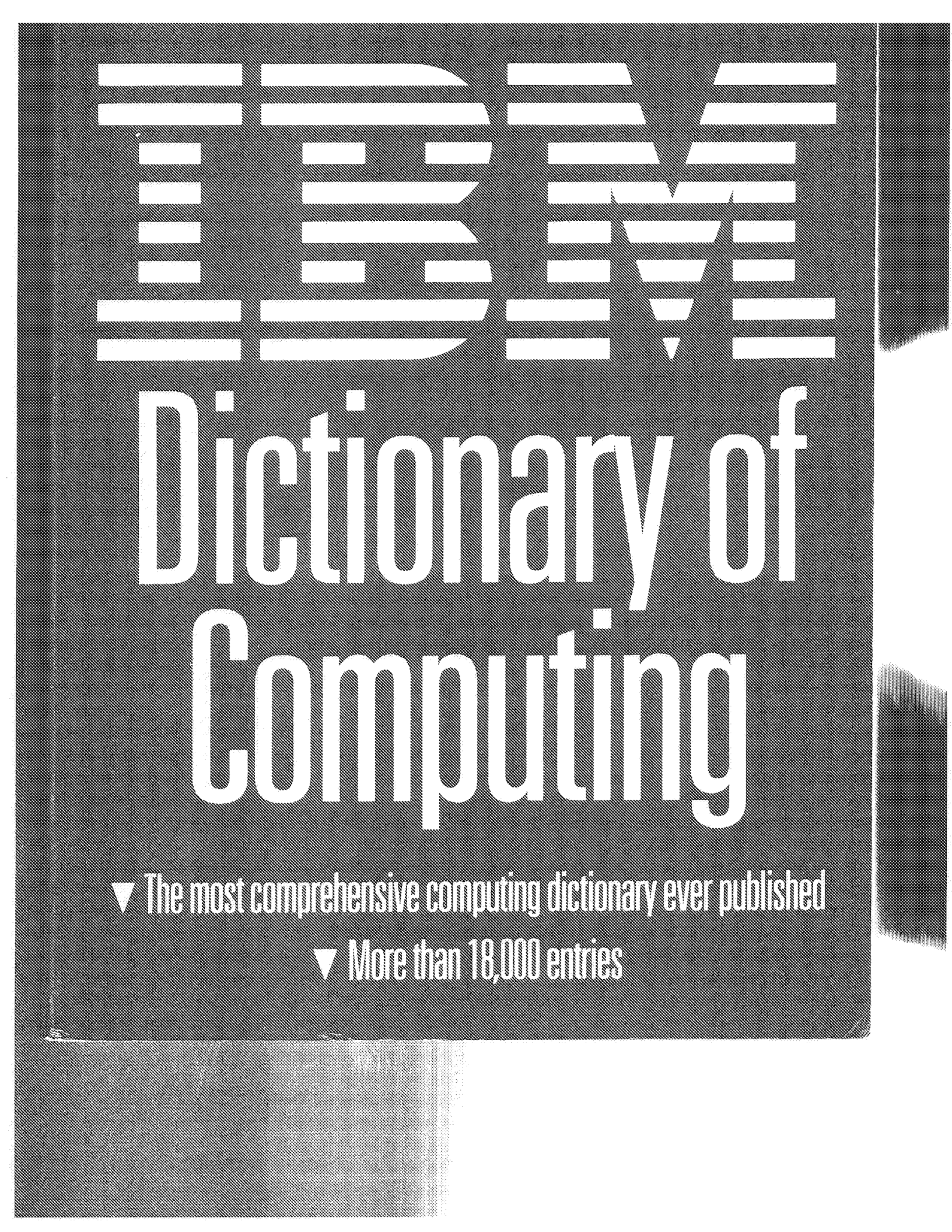
23. The computer-implemented method of claim 22, further comprising:

the management server setting up the DHCP server by identifying which IP addresses the DHCP server is authorized to assign.

24. The method of claim 1, wherein the alert packet is transmitted from said at least one remote processor without said at least one remote processor loading an operating system.

EVIDENCE APPENDIX

Other than the Office Action(s) and reply(ies) already of record and the attached copy of a definition of the term "load" from the IBM Dictionary of Computing from 1999, no additional evidence has been entered by Appellant or the Examiner in the above-identified application which is relevant to this appeal.


IEEE
Dictionary of Computing
▼ The most comprehensive computing dictionary ever published
▼ More than 18,000 entries

Limitation of Liability

While the Editor and Publisher of this book have made reasonable efforts to ensure the accuracy and timeliness of the information contained herein, neither the Editor nor the Publisher shall have any liability with respect to loss or damage caused or alleged to be caused by reliance on any information contained herein.

7 8 9 0 DOC/DOC 9 9 8

ISBN 0-07-031488-8 (HC)
ISBN 0-07-031489-6 (PBK)

The sponsoring editor for this book was Daniel A. Gonneau and the production supervisor was Thomas G. Kowalczyk.

Printed and bound by R. R. Donnelley & Sons Company.

Tenth Edition (August 1993)

This is a major revision of the *IBM Dictionary of Computing*, SC20-1699-8, which is made obsolete by this edition. Changes are made periodically to the information provided herein.

It is possible that this material may contain reference to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such IBM products, programming, or services in your country. Comments may be addressed to IBM Corporation, Department E37/656, P. O. Box 12195, Research Triangle Park, NC 27709.

International Edition

When ordering this title, use ISBN 0-07-113383-6.

This book is printed on acid-free paper.

sually used so that the order
be changed without altering

g languages, a lexical unit
value; for example, 14
urteen, "APRIL" represents
PRIL, 3.0005E2 represents
(2) A symbol or a quantity
is itself data, rather than a
character string whose value
s themselves; for example,
he value 7, and the character
has the value CHARAC-
character-string whose value
set of characters comprising
eric literal, numeric literal.
lefault literal, explicit literal,
ral.

FRAN, a lexical token that
value of intrinsic type.

torage into which an assem-
of the literals specified in a

LMPEO Large message performance enhancement outbound. In VTAM, a facility in which VTAM reformats function management data (FMD) that exceed the maximum request unit (RU) size, as specified in the BIND, into a chain or partial chain of RUs.

LM table Logical unit mode table.

LNS LU network services component.

load (1) To feed data into a database. (T) (2) To bring all or part of a computer program into memory from auxiliary storage so that the computer can run the program. (3) To place a diskette into a diskette drive or a magazine into a diskette magazine drive. (4) To insert paper into a printer.

loadable character set In the 3270 Information Display System, a character set stored temporarily in the device. Contrast with nonloadable character set.

load-and-go An operating technique in which there are no stops between the loading and execution phases of a computer program, and which may include assembling or compiling. (A)

RELATED PROCEEDINGS APPENDIX

There are no related proceedings as described by 37 C.F.R. §41.37(c)(1)(x) known to Appellant, Appellant' legal representative, or assignee.